

CLAIMS

What is claimed is:

1 1. A system for controlling real-time transport protocol flow, comprising:
 2 a plurality of computers that are connected to a first computer, wherein each of said
 3 plurality of computers comprise;
 4 a transceiver;
 5 software stored within said plurality of computers defining functions to be
 6 performed by said plurality of computers; and
 7 a processor configured by said software to perform the steps of,
 8 performing an inbound screen on route information received by said
 9 plurality of computers, from said first computer, to determine if said received route information
 10 should be discarded,
 11 if said route information is not discarded, comparing said received and
 12 screened route information to a local policy defined within said plurality of computers; and
 13 a database on which said local policy is stored, wherein said local policy is used by each
 14 of said associated computers within said cluster of computers.

1 2. The system of claim 1, wherein a single address is used for all of said plurality of
 2 computers.

1 3. The system of claim 1, wherein said received route information is provided within
 2 a telephony routing over Internet protocol (TRIP) update message.

1 4. The system of claim 1, wherein said database also stores internal route
2 information and route information from said received and screened route information.

1 5. The system of claim 4, wherein said processor is further configured by said
2 software to perform the step of, selecting a primary route from a group of routes comprising said
3 internal route information and said received and screened route information.

1 6. The system of claim 5, wherein said processor is further configured by said
2 software to perform the step of, processing a received session initiation protocol (SIP) invite
3 message that is received on said primary route.

1 7. The system of claim 5, wherein said processor is further configured by said
2 software to perform the step of, performing an outbound screen on said received and screened
3 information prior to transmitting said received and screened information outside said cluster of
4 computers, wherein said outbound screen is performed on said primary route prior to said
5 transceiver transmitting said primary route to said first computer.

1 8. The system of claim 1, wherein said local policy comprises an activate date and
2 time field that defines a date and time for said local policy to be enabled by said second
3 processor.

1 9. The system of claim 1, wherein said local policy comprises a de-activate date and
2 time field that defines a date and time for said local policy to be disabled by said second
3 processor.

1 10. The system of claim 1, wherein said local policy comprises an origin field.

1 11. The system of claim 10, wherein said processor is further configured by said
2 software to perform the step of, comparing said origin field within said local policy to an origin
3 attribute within said received route information, if said received route information comprises said
4 origin attribute, and utilizing said local policy if said origin attribute at least partially matches
5 said origin field.

1 12. The system of claim 3, wherein said processor is further configured by said
2 software to perform the step of, utilizing said local policy if said TRIP update message does not
3 comprise an origin attribute.

1 13. The system of claim 11, wherein the format of said origin attribute and said origin
2 field conforms to E.164 style addresses, Internet style addresses, and, SIP telephone addresses or
3 non-SIP telephone addresses.

1 14. The system of claim 1, wherein said local policy comprises a destination field.

1 15. The system of claim 14, wherein said processor is further configured by said
2 software to perform the step of, comparing said destination field within said local policy to a
3 destination attribute within said received route information, if said received route information
4 comprises said destination attribute, and utilizing said local policy if said destination attribute at
5 least partially matches said destination field.

1 16. The system of claim 15, wherein the format of said destination attribute and said
2 destination field conforms to E.164 style addresses, Internet style addresses, SIP telephone
3 addresses, or non-SIP telephone addresses.

1 17. The system of claim 1, wherein said local policy comprises a carrier field that
2 identifies a number of carriers from which said route information will be accepted by said
3 plurality of computers.

1 18. The system of claim 17, wherein said processor is further configured by said
2 software to perform the step of, discarding said received route information if a carrier attribute
3 comprised by said received route information does not match at least one carrier identified by
4 said carrier field.

1 19. The system of claim 1, wherein said local policy comprises a cost field that
2 identifies an acceptable range of cost to be billed for use of a route.

1 20. The system of claim 19, wherein said processor is further configured by said
2 software to perform the step of, discarding said received route information if a cost attribute
3 comprised by said received route information does not fall within said acceptable range of cost
4 identified by said cost field.

1 21. The system of claim 1, wherein said local policy comprises a quality of service
2 (QoS) field that identifies an acceptable range of QoS associated with use of a route.

1 22. The system of claim 21, wherein said processor is further configured by said
2 software to perform the step of, discarding said received route information if a QoS attribute
3 within said received route information does not fall within said acceptable range of QoS cost
4 identified by said QoS field.

1 23. A method of controlling real-time transport protocol flow, comprising the steps

2 of:

3 receiving information regarding a route from a first computer to a plurality of computers;

4 performing an inbound screen on said received route information to determine if said

5 received route information should be discarded; and

6 if said received route information is not discarded, comparing said received and screened

7 route information to a local policy that is used by the computers within plurality of computers.

1 24. The method of claim 23, wherein said route is for ranges conformed to E.164

2 style numbering, Internet style addresses of endpoints, SIP telephone addresses, or non-SIP

3 telephone addresses.

1 25. The method of claim 23, further comprising the step of selecting a primary route

2 from a group of routes comprising, information regarding an internal route that is associated with

3 said local policy, and said received and screened route information.

1 26. The method of claim 25, further comprising the step of processing a received

2 session initiation protocol (SIP) invite message that is received on said primary route.

1 27. The method of claim 25, further comprising the step of performing an outbound

2 screen on said received and screened information prior to transmitting said received and screened

3 information outside said plurality of computers, wherein said outbound screening is performed

4 on said primary route prior to transmitting said primary route.

1 28. The method of claim 23, further comprising the step of enabling said local policy
2 on a specified date and at a specified time in accordance with an activate date and time field
3 defined by said local policy.

1 29. The method of claim 23, further comprising the step of disabling said local policy
2 on a specified date and at a specified time in accordance with a de-activate date and time field
3 defined by said local policy.

1 30. The method of claim 23, wherein said local policy comprises an origin field.

1 31. The method of claim 30, further comprising the step of comparing said origin
2 field within said local policy to an origin attribute within said received route information, if said
3 received route information comprises said origin attribute, and utilizing said local policy if said
4 origin attribute at least partially matches said origin field.

1 32. The method of claim 31, wherein the format of said origin attribute and said
2 origin field conforms to E.164 style addresses, Internet style addresses, SIP telephone addresses,
3 or non-SIP telephone addresses.

1 33. The method of claim 23, wherein said route information is provided within a
2 telephony routing over Internet protocol (TRIP) update message.

1 34. The method of claim 23, wherein said local policy comprises a destination field.

1 35. The method of claim 34, further comprising the step of comparing said
2 destination field within said local policy to a destination attribute comprised by said received
3 route information, if said received route information comprises said destination attribute, and
4 utilizing said local policy if said destination attribute at least partially matches said destination
5 field.

1 36. The method of claim 31, wherein the format of said destination attribute and said
2 destination field conforms to E.164 style addresses, Internet style addresses, SIP telephone
3 addresses, or non-SIP telephone addresses.

1 37. The method of claim 23, wherein said local policy comprises a carrier field that
2 identifies a number of carriers from which said route information will be accepted.

1 38. The method of claim 37, further comprising the step of discarding said received
2 route information if a carrier attribute within said received route information does not match at
3 least one carrier identified by said carrier field.

1 39. The method of claim 23, wherein said local policy comprises a cost field that
2 identifies an acceptable range of cost to be billed for use of a route.

1 40. The method of claim 39, further comprising the step of discarding said received
2 route information if a cost attribute with said received route information does not fall within said
3 acceptable range of cost identified by said cost field.

1 41. The method of claim 23, wherein said local policy comprises a quality of service
2 (QoS) field that identifies an acceptable range of QoS associated with use of a route.

1 42. The system of claim 41, further comprising the step of discarding said received
2 route information if a QoS attribute comprised by said received route information does not fall
3 within said acceptable range of QoS cost identified by said QoS field.

1 43. A system for controlling real-time transport protocol flow through multiple
2 networks, comprising:

3 means for receiving information regarding a route from a first computer to a plurality of
4 computers;

5 means for performing an inbound screen on said received route information configured to
6 determine if said received route information should be discarded; and

7 means for comparing said received and screened route information to a local policy that
8 is used by the plurality of computers if said route information is not discarded.

1 44. The system of claim 43, wherein said route is for ranges conformed to E.164 style
2 numbering, Internet style addresses of endpoints, SIP telephone addresses, and non-SIP
3 telephone addresses.

1 45. The system of claim 43, further comprising a means for selecting a primary route
2 from a group of routes comprising, information regarding an internal route that is associated with
3 said local policy, and said received and screened route information.

1 46. The system of claim 45, further comprising a means for processing a received
2 session initiation protocol (SIP) invite message that is received on said primary route.

1 47. The system of claim 45, further comprising a means for performing an outbound
2 screen on said received and screened information, configured to perform said outbound screen
3 prior to transmitting said received and screened information outside of said plurality of

4 computers, and wherein said means for performing said outbound screen performs outbound
5 screening on said primary route prior to transmitting said primary route outside of said plurality
6 of computers.

1 48. The system of claim 43, further comprising a means for enabling said local policy
2 on a specified date and at a specified time in accordance with an activate date and time field
3 defined by said local policy.

1 49. The system of claim 43, further comprising a means for disabling said local policy
2 on a specified date and at a specified time in accordance with a de-activate date and time field
3 defined by said local policy.

1 50. The system of claim 43, wherein said local policy comprises an origin field.

1 51. The system of claim 50, further comprising a means for comparing said origin
2 field within said local policy to an origin attribute within said received route information if said
3 received route information comprises said origin attribute, and which utilizes said local policy if
4 said origin attribute at least partially matches said origin field.

1 52. The system of claim 51, wherein the format of said origin attribute and said origin
2 field conforms to E.164 style addresses, Internet style addresses, SIP telephone addresses, or
3 non-SIP telephone addresses.

1 53. The system of claim 43, wherein said route information is provided within a
2 telephony routing over Internet protocol (TRIP) update message.

1 54. The system of claim 43, wherein said local policy comprises a destination field.

1 55. The system of claim 54, further comprising a means for comparing said
2 destination field within said local policy to a destination attribute within said received route
3 information if said received route information comprises said destination attribute, and which
4 utilizes said local policy if said destination attribute at least partially matches said destination
5 field.

1 56. The system of claim 51, wherein the format of said destination attribute and said
2 destination field conforms to E.164 style addresses, Internet style addresses, SIP telephone
3 addresses, or non-SIP telephone addresses.

1 57. The system of claim 53, wherein said local policy comprises a carrier field that
2 identifies a number of carriers from which said route information will be accepted.

1 58. The system of claim 57, further comprising a means for discarding said received
2 route information if a carrier attribute with said received route information does not match at
3 least one carrier identified by said carrier field.

1 59. The system of claim 43, wherein said local policy comprises a cost field that
2 identifies an acceptable range of cost to be billed for use of a route.

1 60. The system of claim 59, further comprising a means for discarding said received
2 route information if a cost attribute comprised by said received route information does not fall
3 within said acceptable range of cost identified by said cost field.

1 61. The system of claim 43, wherein said local policy comprises a quality of service
2 (QoS) field that identifies an acceptable range of QoS associated with use of a route.

1 62. The system of claim 61, further comprising a means for discarding said received
2 route information if a QoS attribute comprised by said received route information does not fall
3 within said acceptable range of QoS cost identified by said QoS field.